

Remarks

Claims 1-23 are pending in this application. Claims 1-23 were subject to a restriction requirement dated December 1, 2005, in which the claims were divided into six Groups (I-VI). Applicants provisionally elect **Group II** (drawn to a method of modifying a target nucleic acid, within a host that is capable of expressing a reverse transcriptase *at the same time as, or after, transforming the host*) **with traverse**. Applicants request that the requirement for restriction be withdrawn or modified based on the amendments and comments provided herein.

Claim 1 is amended herein. Claim 1 is amended to clarify that the gene targeting construct used in the claimed methods produces “a gene targeting message RNA capable of self-priming.” No new matter is introduced by way of the amendment to the claim. Support for gene targeting RNAs that are capable of self-priming is found throughout the specification, for example, at page 17, lines 14-17, Figure 1 and claim 5 as originally filed.

Groups I-VI share a special technical feature that relates to a single general inventive concept

This application is a National Phase of an international patent application filed under the PCT. The applicable standard with respect to restriction practice in a National Phase Application is the Unity of Invention Standard under PCT Rule 13.1 and 13.2. Under PCT Rule 13.2, if various embodiments of an invention are linked by a shared special technical feature it is improper to divide them into separate inventions for the purpose of examination. Accordingly, in the present application, the claims can only be restricted into more than one group for the purpose of examination if 1) there is no shared special technical feature, and 2) there would be an undue burden on the Examiner to examine the claims in a single application.

In the present case, neither of these conditions is met. It is alleged in the Office action that the inventions of Examiner’s Groups I-VI lack a unifying special technical feature. Applicants disagree. At least Groups I, II, III, V and VI share a special technical feature. Specifically, all of these Groups are based on gene targeting constructs that encode a “gene targeting message RNA capable of *self-priming reverse transcription by a reverse transcriptase*.”

The methods of Groups I and II (both of which Groups include claim 1) involve introducing into a host, a gene targeting construct that when expressed produces a “gene targeting message RNA capable of self-priming reverse transcription by a reverse transcriptase.” The construct of Group III is a gene targeting construct that encodes and is capable of expressing a gene targeting message RNA that is “capable of self-priming reverse transcription by a reverse transcriptase.” The host of Group V incorporates a gene targeting construct of Group III, and therefore also includes a gene targeting construct that encodes a gene targeting message RNA that is “capable of self-priming reverse transcription by a reverse transcriptase.” Group VI, which encompasses constructs also included in Group III, as well as methods of transforming host cells with vectors containing the constructs of Group III, also relates to constructs (and methods for using such constructs) that encode a gene targeting message RNA that is “capable of self-priming reverse transcription by a reverse transcriptase.” Thus, at least Groups I, II, III, V and VI all share the same special technical feature, of a gene targeting construct that when expressed produces a gene targeting message RNA capable of self-priming reverse transcription by a reverse transcriptase.

The special technical feature of a gene targeting construct that produces a gene targeting message RNA capable of self-priming reverse transcription by a reverse transcriptase constitutes a contribution over the prior art. The Examiner contends that Mao *et al.* (JBC 270:19684-19687) teaches retons capable of forming triple helices, and that Datta *et al.* (NAR 29:5140-5147) teaches the use of triple helix forming ssDNAs as gene-targeting agents. The Examiner argues that “it would have been obvious to the ordinary practitioner in the art at the time of the instant invention to modify a target locus with a gene-targeting construct” in view of the teachings of Mao and Datta. To the extent that the Examiner means that Mao and Datta in combination render obvious the modification of a target locus gene targeting constructs capable of producing “a gene targeting message RNA capable of self-priming reverse transcription by a reverse transcriptase,” Applicants strongly disagree.

Neither Mao nor Datta disclose or in any way suggest constructs that encode and are capable of expressing message RNAs capable of self-priming reverse transcription. These references, whether singly or in combination, simply do not teach all of the limitations (and indeed, do not teach the special technical feature) of the claimed compositions and methods.

Thus, these references cannot render the claims (or for that matter, the special technical feature) obvious. Accordingly, because the claims of Groups I, II, III, V and VI share a novel and non-obvious special technical feature that relates to a single inventive concept, it is impermissible for the Office to restrict the claims for purposes of examination.

Additionally, restriction of the invention into multiple groups is only appropriate if examination of the claims in a single application would pose an undue burden on the Examiner. In the present case, there is no undue burden, in particular because the claims share a special technical feature which links the compositions (including constructs, vectors and hosts) and methods using such compositions.

Therefore, Applicants respectfully request that the claims of Groups I, II, III, V and VI be rejoined for examination.

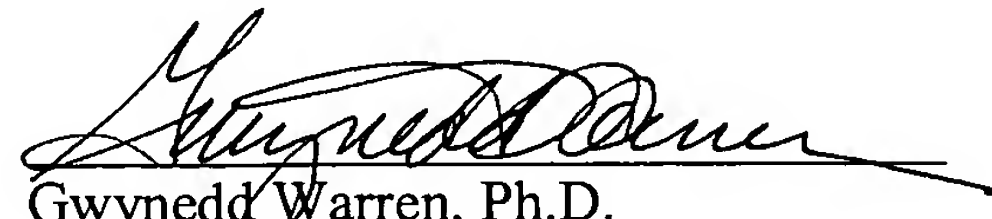
Conclusions

In conclusion, Applicants provisionally elect **Group II with traverse**, and requests that Groups I, II, III, V and VI be rejoined for examination. If anything further is required, or if the Examiner believes that a telephone conference would expedite consideration of this case, he is invited to telephone the undersigned.

Respectfully submitted,

KLARQUIST SPARKMAN, LLP

By


Gwynedd Warren, Ph.D.
Registration No. 45,200

One World Trade Center, Suite 1600
121 S.W. Salmon Street
Portland, Oregon 97204
Telephone: (503) 595-5300
Facsimile: (503) 228-9446